MESOCOLIC OR RETROGASTRIC HERNIA.

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A REVIEW of the literature on rare forms of intra-abdominal hernia, for which I am indebted to Dr. D. C. Balfour, leads me to the conclusion that the two following cases are sufficiently unusual to warrant a report of them. It is interesting to note that notwithstanding the peculiarity of the conditions, the operative findings were practically identical, and the original pathological lesions were the same in each instance. Both patients came under observation and were operated upon during 1908.

CASE I.—Mrs. K., aged 59, gave a history of having had, during the past fifteen years, attacks of severe "indigestion," *i.e.*, epigastric pain of a crampy character coming on one-half to one hour after meals, reaching its greatest severity three or four hours later. This pain was accompanied by much gas and sour, burning eructations. The patient would frequently vomit immense quantities of undigested food-remnants sometimes streaked with flecks of blood, when the retching was severe. Several times she had vomited food known to have been eaten a week previously. Her bowels were irregular and she had been troubled a great deal with flatulency and occasionally with general abdominal cramps. She had lost much in weight, strength, and appetite, and was in an emaciated condition when she presented herself for consultation.

On examination, marked visible peristalsis was found over the whole abdomen, and a peculiar fulness and resonance in the upper abdominal zone. Air dilatation showed the lower stomach border just over the pubes. The stomach contained food-remnants after fourteen hours. An examination of the contents after an Ewald test-breakfast showed total acidity, 75; free HCl, 65; and combined HCl, 10. At this time there was no evidence of any

occult blood either in the stomach-contents or fæces. The marked anæmia present was found to be the simple secondary form.

From the history obtained from the patient, together with the physical examination, it was evident that pyloric obstruction was present, probably due to a long-standing ulcer near the outlet of the stomach, and an exploration was advised.

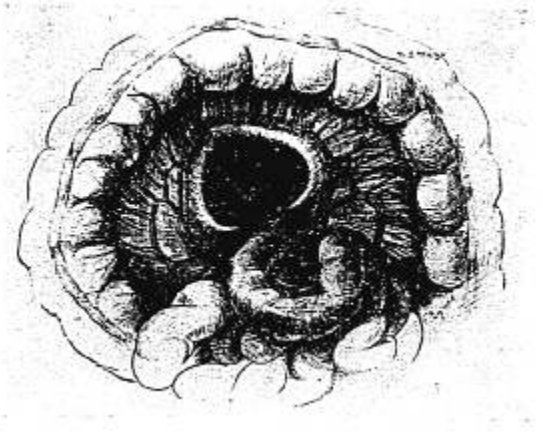
The operation was performed at St. Mary's Hospital, May 30, 1908. The abdomen was opened by a median incision above the umbilicus, and the distended intestine came at once into view. The stomach was completely covered with the small intestine. The mesentery was traced to an opening in the gastrohepatic omentum which allowed the ileum and jejunum to lie above and in front of the stomach. On reduction a huge rent of the mesocolic omentum was found through which the entire small intestine, with the exception of the first three inches and terminal foot, and the whole extent of the mesentery had passed into the lesser sac of the peritoneum behind the stomach and out through a second opening in the gastrohepatic omentum. The opening in the mesocolon was at the exact site where this structure is split to admit of the usual posterior no-loop gastro-enterostomy, and extended up to the circle of the middle colic artery (Fig. 1). The openings in both the mesocolon and gastrohepatic omentum were about five inches in diameter and the margins were round and smooth, the condition evidently being of long standing. There was no limiting peritoneum or sac. Four inches from the origin of the jejunum was a marked groove where the intestine had hung over the lesser curvature of the stomach. After reduction, the hernial opening was closed by suturing the margins with linen to the posterior wall of the stomach.

There was a large ulcer of the duodenum present extending up to the pylorus, adherent behind and causing a most marked grade of obstruction, for which a posterior no-loop gastrojejunostomy was performed.

The patient made an uneventful recovery, left the hospital on the eleventh day, and was discharged eighteen days from the date of operation.

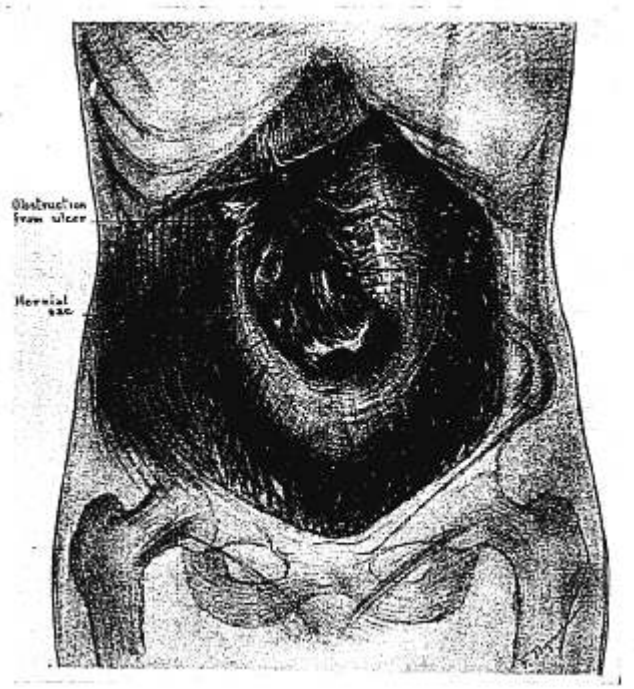
Case II.—Mrs. S., aged 32. Although comparatively a young woman, this patient had a history of stomach trouble extending over a period of some 25 years, having had since a child attacks of severe epigastric pain, radiating through to the back and asso-

FIG. 1.



Showing the hernial opening in the transverse mesocolon.

FIG. 2.



Shows the hernial protrusion in Case II, as it appeared above and in front of the stomach.

ciated with much gaseous distention and frequent vomiting. These attacks had no constant relation to meals and the intervals between them varied greatly in duration. During these latent periods the patient would enjoy comparative comfort, and at one time was free from all symptoms for some four years.

Recently, however, the condition became aggravated, the attacks more frequent, and the pain often severe enough to require morphine. She had acquired the practice of relieving her distress by drinking large quantities of water to induce vomiting; the washings always contained food particles. On air distention the stomach was found to be greatly dilated and contained food-remnants after 14 hours. Ewald breakfast showed moderate free acid and occult blood, but was unsatisfactory because of the great retention.

The patient was operated upon December 5, 1908, at St. Mary's Hospital. On opening the abdomen by an incision above the umbilicus a peculiar tumor above the stomach presented as a hernia-like mass behind the stretched and bulging gastrohepatic omentum, depressing the stomach so that the lesser curvature was on a line with the umbilicus and the greater curvature at the pubes (Fig. 2). Drawing up the stomach, omentum, and transverse colon, an opening was found in the transverse mesocolon some four inches in diameter, and as in the previous case, at the point where the mesocolon is usually opened in a posterior gastro-enterostomy, that is, in the avascular portion in front of the ligament of Trietz (Fig. 1). Through this opening about five feet of the jejunum had entered, passed behind the stomach, carrying the peritoneum of the transverse mesocolon ahead as a sac, the firm ring of which was at the loop of the middle colic artery. The sac passed behind the stomach, pressing upon and pushing forward the gastrohepatic omentum as an outer sac. These two structures had become fused, obliterating the lesser cavity of the peritoneum at that point, over an area about the size of a silver dollar. The stomach was prolapsed and dilated so that it filled almost the entire abdomen and pelvis, and contained three quarts of food and fluids, which were removed during the operation. There was an ulcer of the first portion of the duodenum which had perforated posteriorly and become adherent to the head of the pancreas. The sac was obliterated by linen sutures to the posterior wall of the stomach and posterior no-loop gastro-enterostomy was performed.

The patient's convalescence was uninterrupted. She gained weight at the rate of a pound a day for the first 22 days.

These two cases present features of interest not only on account of their rarity but also because of the primary pathological condition which appears to have been the important factor in the production of the hernias.

Both patients were of the type of build Martin describes as typical of Glénard's disease (*Surg., Gyn., and Obstet.*, Dec., 1908). The kidney of each was prolapsed, the uterus low and retroverted, and undoubtedly there was in each case a primary prolapse of the stomach. The duodenal ulcer which existed in both had undergone a chronic perforation causing dense adhesions and fixing the duodenum beyond the stomach just as the cardiac end is held normally by the œsophagus. Had the ulcer been the usual type of saddle ulcer of the lesser curvature of the stomach, the hernia could not have occurred because of the adhesive obliteration of the upper part of the lesser cavity of the peritoneum. The obstruction in both instances was extreme, the huge stomach sagging down in front of the intestines. The patients were emaciated and dehydrated and for months had been in the habit of emptying the stomach every 24 to 48 hours of a great accumulation of undigested and unpassed food products. The abdominal muscles exerted great force in these violent efforts at vomiting, compressing the intestines behind the stomach, which was fixed at each extremity and greatly prolapsed in its middle part. In this way pressure was brought to bear on the transverse mesocolon upward in the line of least resistance, causing this peculiar form of hernia.